

FIG. 1A

FIG. 1A

FIG. 1B

Aptamer Selection

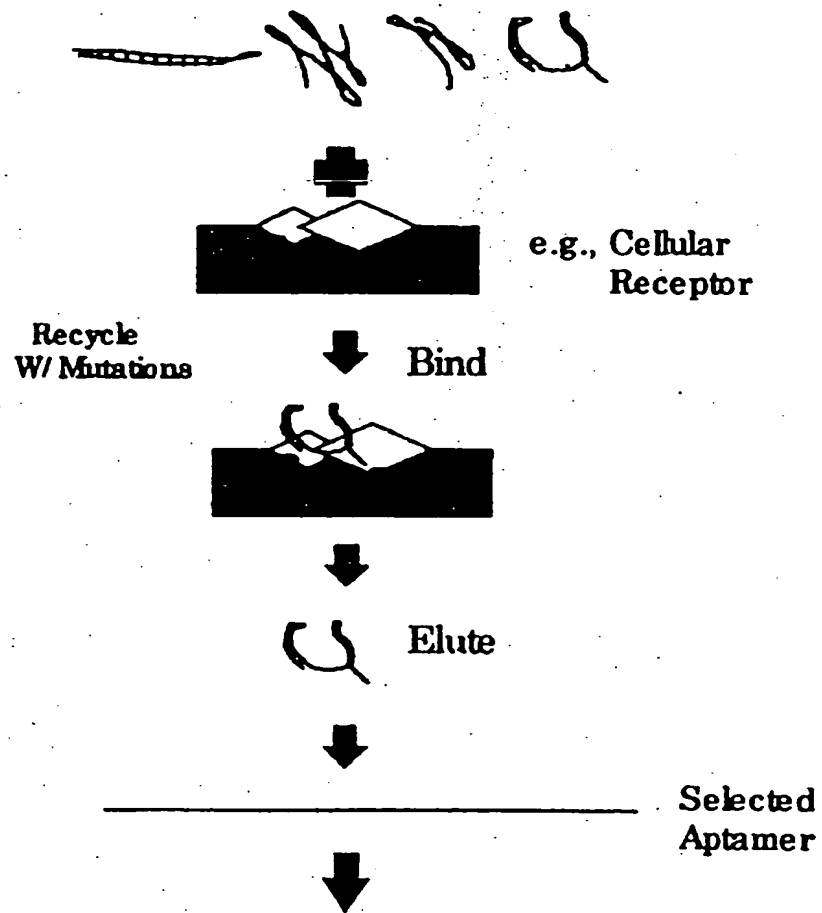


FIG. 1B

Aptamer Generation

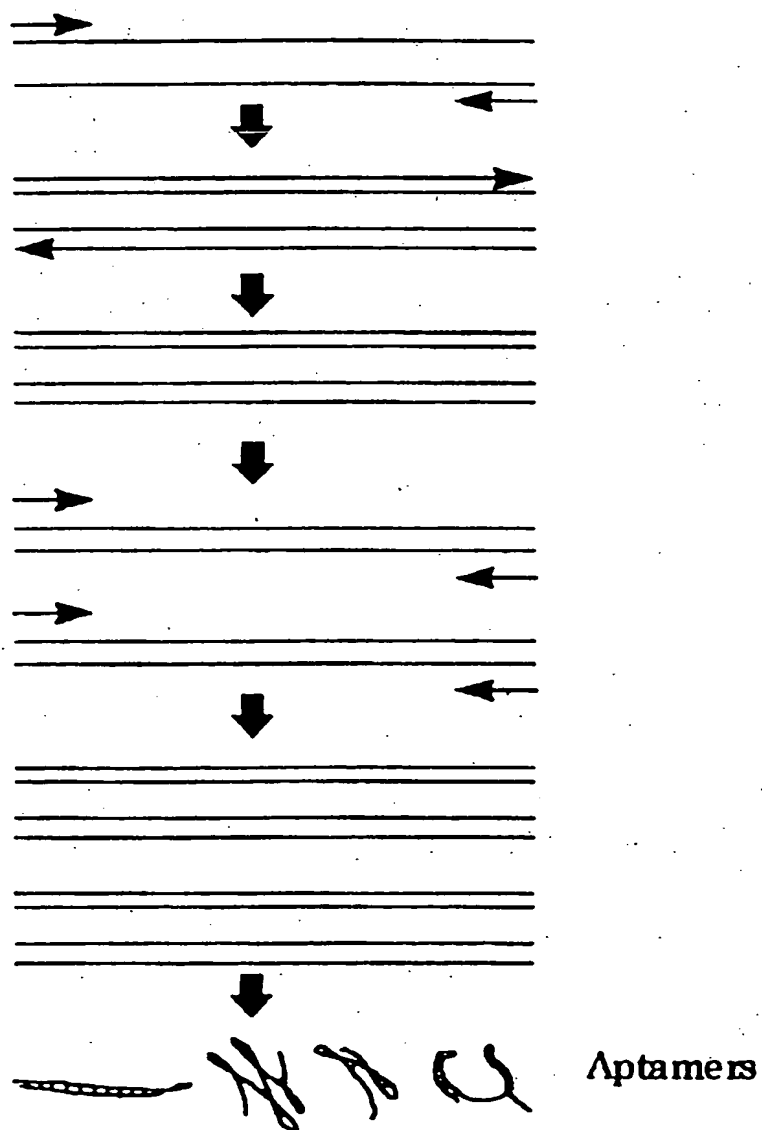
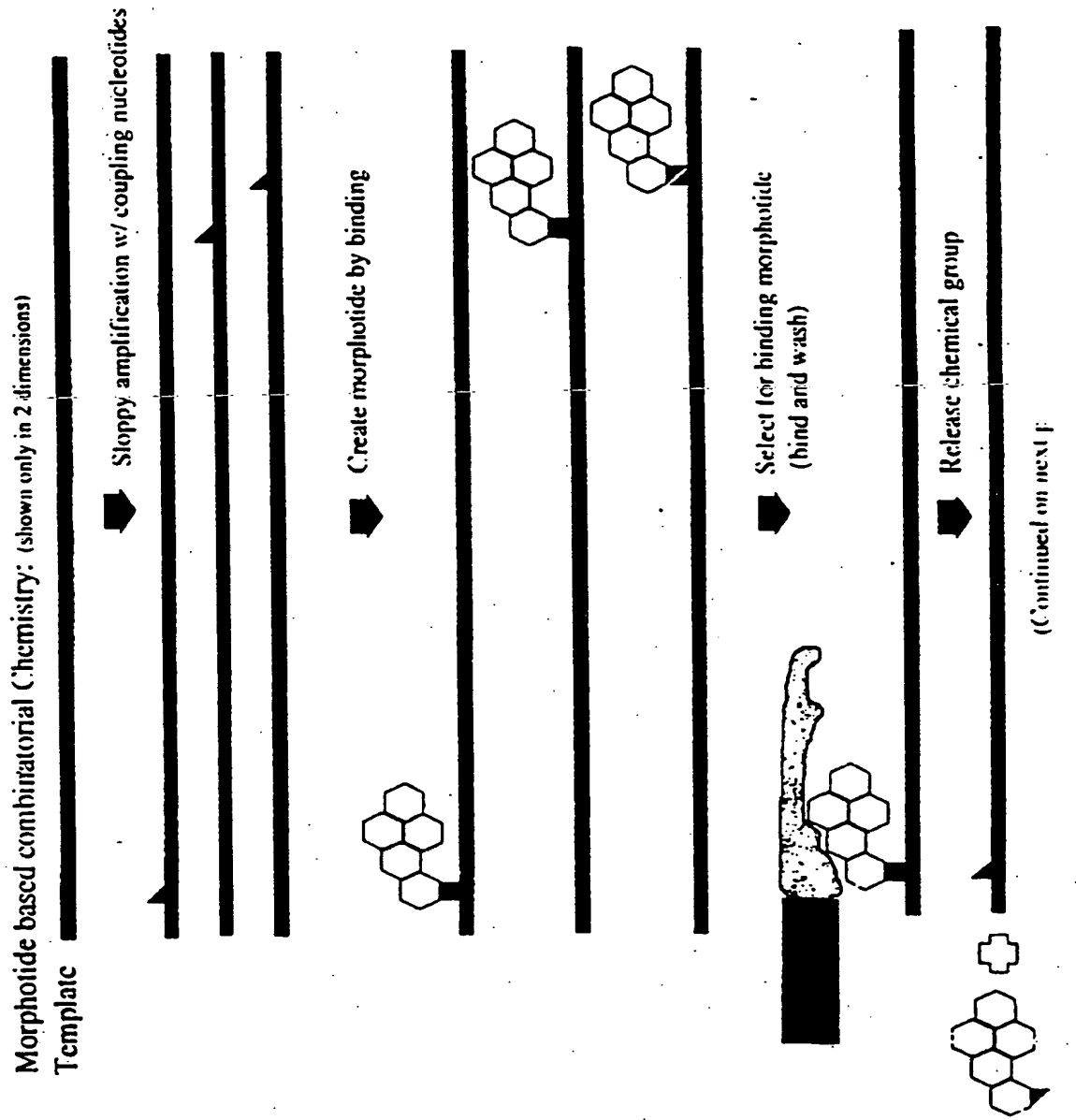


FIG. 2A

FIG. 2A

FIG. 2B



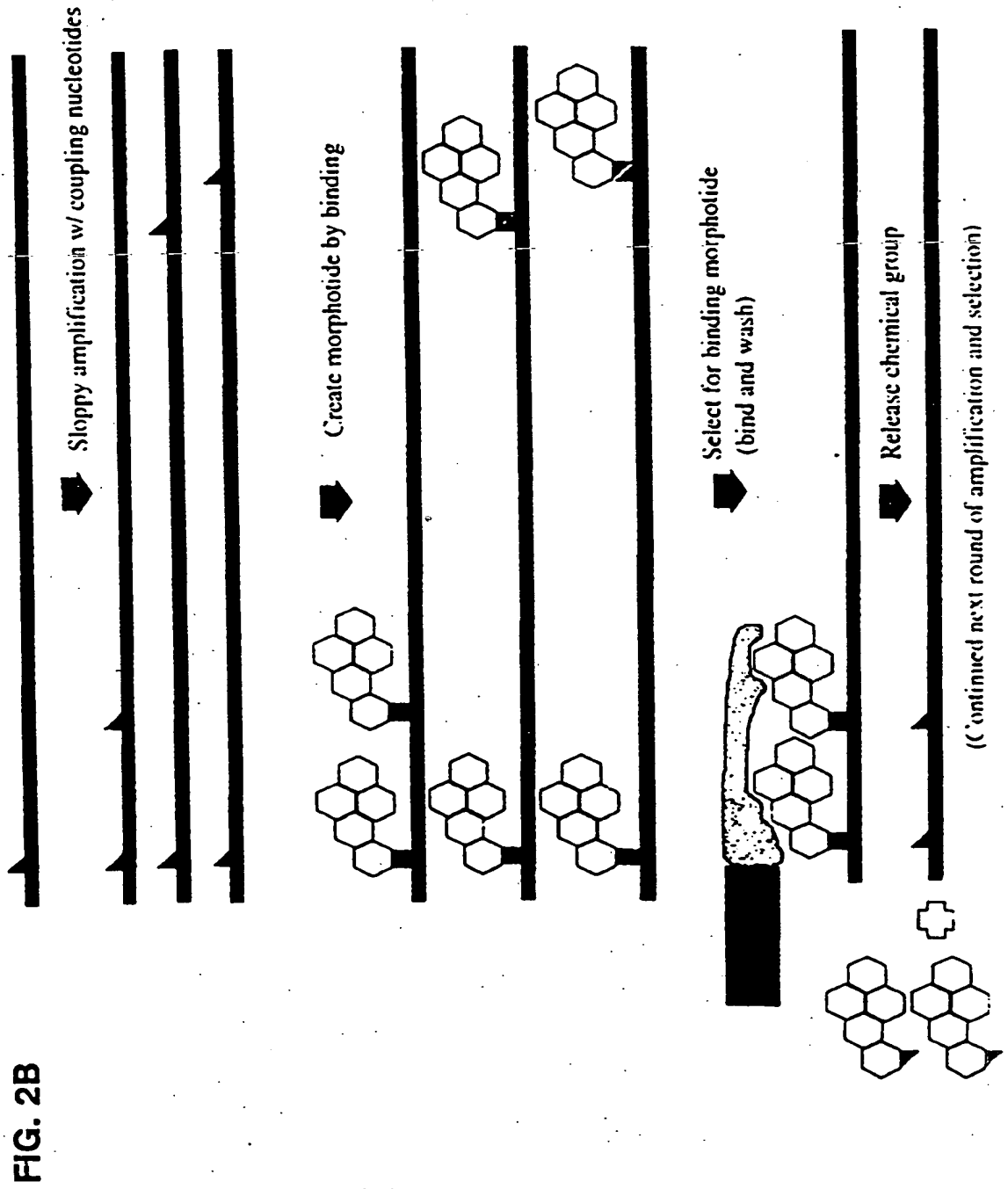
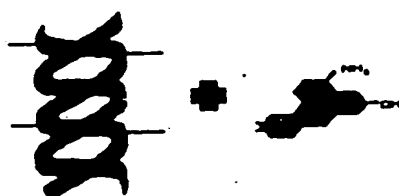


FIG. 3A

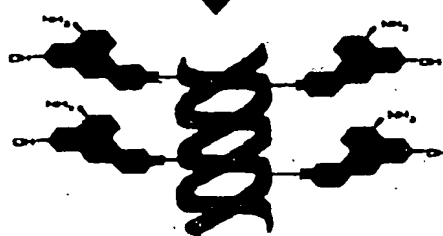
FIG. 3A FIG. 3B

Reversible Coupler

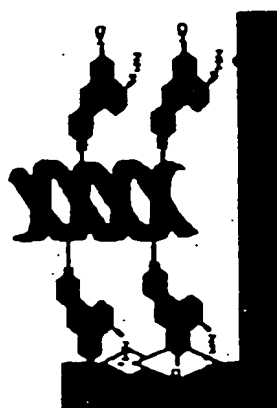
Shape & Structure Library



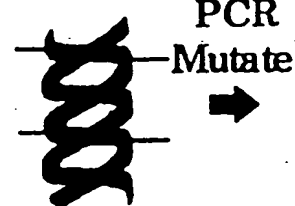
Coupling Step



Bind



Elute w/
pH Shift



PCR
Mutate



FIG. 3B

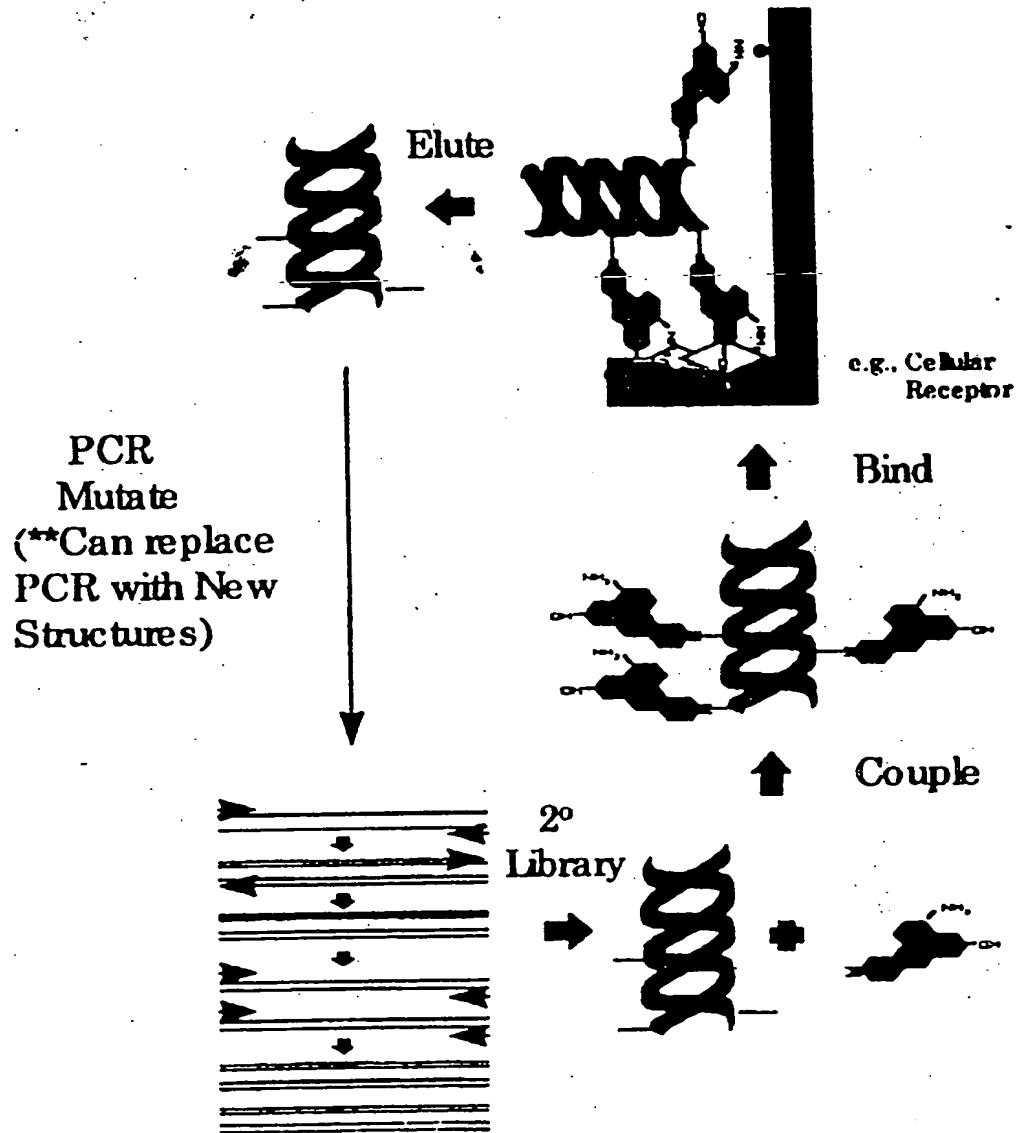
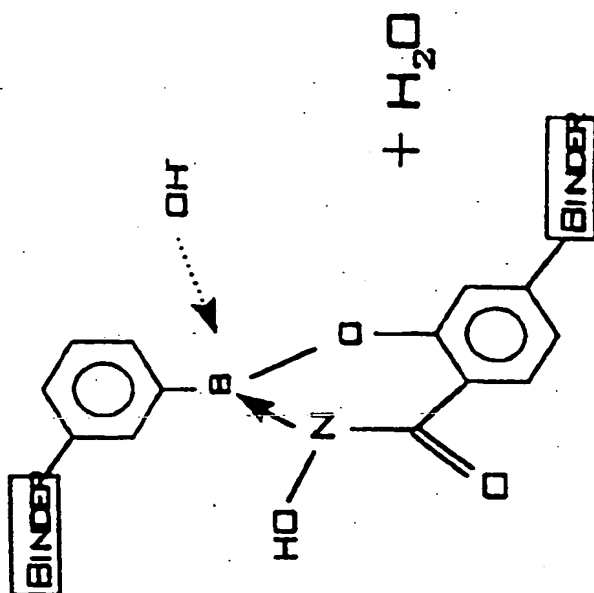


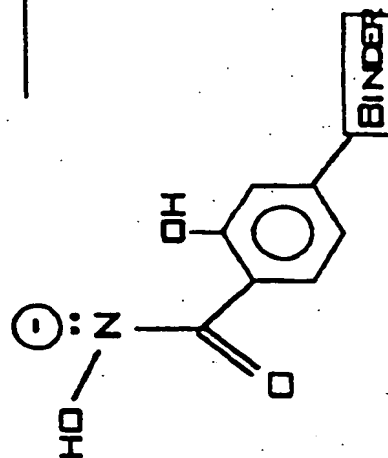
FIG. 4

Candidate bioconjugate:
Phenylboronic Acid

✓ STD. CHEMISTRY COUPLING TO ATTACH



CONDENSATION



$PK_A = 4.2$
 $K_D = 10^{15}$

REVERSIBLE COMPLEX 1.5 UNITS OF PH = OXIDATION BY HYDROLYSIS
CAN TRAP AT PHB & CAN RELEASE